

GENERAL LIGHTING NOTES

General Provisions

- Provide all materials as detailed on drawings, specifications and/or schedules, and labor as required to achieve a complete and operating lighting system.
- Contractor shall perform all work in strict accordance with all local and national governing codes, including seismic if applicable. Work not in conformance with applicable codes shall be brought into compliance at the contractor's expense.
- All electrical material and equipment shall be in new condition when installed. All equipment shall be listed, labeled or certified by a nationally recognized testing laboratory. Immediately notify lighting designer if any specified lighting equipment is not appropriately listed, or arrives without appropriate labeling.
- All equipment shall be factory tested to ensure proper operation prior to shipment to job site.
- Contractor shall guarantee all materials and workmanship related to the electrical installation for a minimum period of one year from the date of ownership turnover. Any defects in materials or workmanship during this guarantee period shall be corrected at the contractor's expense.
- Contractor shall visit site prior to bid date, to verify all existing conditions to be encountered in the installation of all new equipment, fixtures, devices, feeders, etc. Exact installation method and requirements shall be verified and determined prior to bid date. Contractor shall immediately notify lighting designer of any required modifications that are not shown on the drawings. Submittal of bid indicates contractor is cognizant of all job site conditions and work to be performed.
- All equipment, electrical characteristics, locations, and connection requirements shall be verified prior to any rough-in work.
- The complete electrical system shall be grounded in accordance with NEC requirements.
- Electrical contractor shall be licensed in the jurisdiction where the project is located, and capable of employing the proper labor force necessary to complete the installation as instructed by owner.
- Contractor shall be capable of making emergency warranty repairs within twenty-four (24) hours of notification when a system or component malfunctions during use.
- All measurements found in lighting plans are approximate. Contractor shall make field measurements based on actual site conditions to develop complete orders and install systems per drawings and specifications.
- Emergency egress lighting shall be the responsibility of the Electrical Engineer in consultation with the owner's lighting representative.
- Contractor shall properly verify all circuitry, dimming and control prior to test and adjust phase commencing.
- Contractor to refer to Interior Design (ID), Architectural (A) and Lighting Drawings (LD) and specification packages for all mounting heights and details for special mounting requirements.

Installation

- All fixture voltages shall be determined by electrical engineer.
- Fixtures shall have appropriate UL or other recognized testing agency label, as well as damp or wet listing as required by local codes.
- Responsibility for emergency lighting, ICC calculations, and circuiting to meet code compliance remains with the Architect and Electrical Engineer as required by law.
- Fixtures shall include accessories for installation according to local and national codes.
- Prior to accepting lighting equipment, the contractor shall verify:
 - Fixture locations
 - Fixture mounting conditions
 - Ceiling trim compatibility
 - Recess depths
 - Existence of IC or other restrictive conditions
 - Fire rated ceiling or locations
 - Fixture voltage
- Contractor to coordinate approved fire-rated enclosures for lighting fixtures located in a fire-rated ceiling.
- Contractor to coordinate IC housing requirements, if any, as required.
- Lamps and accessories (e.g. color filters, louvers, etc.) shall be installed in fixtures in accordance with the provided fixture schedule.
- Ceiling thickness in excess of 1/2" shall be identified in writing by the contractor or architect.
- Fixtures shall be ordered with the appropriate ballasts complete UL, CBM or other recognized testing lab labels. Where required, ballasts shall conform to energy code requirements for performance, switching, and wiring (e.g. tandem).
- Walls directly illuminated by uplight or downlight wall wash shall be installed and finished in a manner to eliminate shadows or blemishes (e.g. hang dry wall vertically, and level 5 drywall finish).
- The drawings are diagrammatic and represent the design intent of the equipment, devices, etc. to be connected and the circuits to which they are to be connected to. Contractor shall install all conduit, j-boxes, etc., as required for a complete and operating system.
- All custom length fixtures (e.g. continuous wall slot fixtures) shall be field measured prior to ordering, and manufacturer shop drawings issued to the lighting designer for review prior to release for manufacture.
- Contractor shall include all miscellaneous items required to complete work and make fixture and lighting systems fully operational.
- Lighting fixtures, shown in these drawings, shall not be used as worklights during construction and shall be fully operational at the time of opening to the public.
- Contractor shall provide Owner and Lighting Designer with one set each of electrical "As-Built" at the completion of job.
- Lighting Design Alliance specifically reserves the right to relocate any equipment or outlet at no increase in contract cost prior to its installation (in case of standard product) or release for manufacture (in the case of custom product), regardless of prior shop or design drawing review.
- Contractor shall be responsible for rough and final aiming and focus of all lighting fixtures as directed by lighting designer during Test and Adjust phase.

Execution

- All conduit runs shall be concealed unless shown otherwise, or approved.
- Existing conditions shown are from available record drawings and visual field survey and are shown for reference only. Contractor shall verify actual existing conditions at site.
- Contractor to supply a minimum of two electricians for each Lighting Designer directing focus during the Test and Adjust phase (AKA Focus and Programming). Electricians to be minimum journeyman level experience. Contractor must supply adequate support including ladders, lifts or other equipment required to access fixtures at the time for focus, including evening or night work as may be required due to schedule conflict or daylight impact.
- Contractor to have all necessary equipment available throughout Test and Adjust phase including, but not limited to:
 - Standard contractor electrician hand tools
 - Socket set
 - Clean lint-free towels or wipes to clean lenses and reflectors
 - Spare lamps for fixtures being focused
 - Ladders, fully-charged lifts or other means of access to areas being focused
 - Safety harnesses or other devices as required.

Submittals

- Distributor to submit for approval on the products he intends to furnish within (7) days of award of contract. Failure to submit within deadline constitutes a guarantee that only the base specified products will be supplied and that no other products, whether listed as alternates or not, will be considered.
- Requests for approval of non-specified products must be accompanied by the following at least five (5) business days in advance of the bid submittal date:
 - Specification data sheet complete with manufacturer name and specified model number, as well as manufacturer's published photometrics
 - A list of comparable projects where the product has been used in the last (2) years
 - Sample of product.
- Manufacturers of submitted products must have been in business for five years and in no instance will this project be the occasion of the first installation of this product if it is not listed on the specification.
- Distributor shall allow proper ordering time for procurement of fixtures. Lighting Design Alliance shall be notified immediately of any product substitutions as a result of delivery, prior to ordering alternate product. Failure to order fixtures with adequate lead-time to meet the installation schedule does not relieve the contractor of the responsibility to provide and install the specified product, even after substantial completion, with all labor and material charges for other trades at the contractor's expense.
- Should a manufacturer fail to deliver a product that has been ordered within reasonable lead-time, Distributor/Contractor shall notify Lighting Design Alliance with a proposed alternate fixture. Lighting Design Alliance shall maintain final authority for authorization of any substitution.
- Lamps and any accessories specified shall be included in the submittal package for all fixtures. If no submittal is made on lamps, lamps must be provided as specified, or from approved manufacturers: Philips, Osram Sylvania, General Electric, Ushio, and Venture.
- Contractor shall provide Complete Maintenance Manuals including, but not limited to:
 - Required scheduled maintenance.
 - Original Manufacturer's Equipment (OME) technical data sheets.
 - Detailed operating procedures.
 - A list of recommended spare parts and lamps.
 - Installation wiring diagrams.
 - Shop drawings
 - Installation and/or construction As-Built drawings.

Fixture Specifications

- All lighting fixtures shall be mounted and supported in accordance with applicable safety standards and all national and local electrical codes.
- All exterior equipment shall be rated for wet location and the IP rating of all equipment shall conform to the conditions in which the fixture is mounted.
- Contractor shall provide fixture-mounting kits as required to suit the exact type of ceiling or condition to which they are mounted.
- All fixtures shall be supplied with accessories as listed.
- All remote transformers and/or ballasts are to be located as close to the fixture as possible, hidden from guest view in an accessible compartment that is well ventilated to provide heat dissipation.
- All transformers shall be fused on the secondary side.
- LED fixtures requiring digital communication for complete functionality shall be provided with allowances for: routing and pulling required, digital control wiring as per the manufacturer's specification; termination of digital control wiring for signal transmission; addressing, commissioning, and verification of all LED digital controls; interface with dimming and control system or building management controls as necessary.
- Contractor to supply lamps only from approved lamp manufacturers. Approved manufacturers: Philips, Osram Sylvania, General Electric, Ushio, Venture.
- Color filters shall be glass or dichroic unless otherwise indicated in drawings or specifications.
 - Where a specific color has not been called for in specifications, contractor shall confirm color with lighting designer prior to ordering.
 - Contractor to provide 20% additional color filters for each color and size.
- Contractor to provide lamps for all fixtures in full cases to exceed the number required by no less than 10%.
- Contractor to replace all burned out or inoperative lamps at the end of the construction phase prior to Test and Adjust (also known as "aiming" of "focusing") phase and once again prior to Owner occupancy or project opening.

Dimming and Control System Specifications

- Equipment specified shall be the sole responsibility of a single manufacturer. The manufacturer shall have been producing lighting control equipment for at least ten years. In order to maintain a high standard of quality and service, the manufacturer of the complete system shall also be the manufacturer of the dimmer modules used in the system.
- Lighting control systems required shall include all major components indicated, as well as incidental components required for proper operation.
- All branch circuits terminating in a dimmer panel shall have a separate dedicated neutral conductor. There shall be NO common neutral conductors used for any load or branch circuit wiring from the dimmers.
- Contractor shall be responsible for termination of line and load wires in the dimmer bank. Control conduit and control wires shall be installed by the Contractor.
- Distributor/Contractor shall include and coordinate factory startup.
- Contractor shall include and coordinate factory commissioning. Contractor shall notify Lighting Design Alliance of date of factory commissioning.
- Upon completion of the installation, the system shall be completely commissioned by a factory-employed engineer. The check-out will be performed after all loads have been tested live for continuity and freedom from defects. Contractor shall verify that all control wiring has been connected and checked for proper continuity. The factory-employed engineer shall demonstrate and educate the owner's representative(s) on the system capabilities, operation and maintenance.
- Emergency warranty repairs shall be performed by a factory trained service technician within twenty four (24) hours of notification when a system or component malfunctions during use.
- Manufacturer shall offer upgraded warranty based upon successful field commissioning.
- Manufacturer shall offer a renewable service contract on a year to year basis which will include parts and factory labor as well as annual training visits.
- Manufacturer shall be capable of providing on-site service support within 24 hours anywhere in the continental USA and within 72 hours anywhere in the world, except where special visa are required.
- Service contracts will be available for up to ten years from date of system commissioning.
- Dimmed circuits that also control lights designated as part of emergency egress lighting are to be routed through a system that allows immediate bypass of dimmed circuit to allow lighting to come to full in emergency situations as required by local and national codes.

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	SHORT DESCRIPTION	MANUFACTURER & CATALOG #	LIGHT SOURCE	WATTS	VOLTS	LOAD TYPE	DIM TYPE	REMARKS
AL1	Stake-mounted landscape uplight with glare shield and: • Optics: 35" • Dimensions: 2.45'Ø x 8.65'L • Transformer: remote, dimming	Landscape Uplights	Hydrel LED • Luminaire: ASPEN-A-P1-90-27K-12-35-WSL-KM-C3-(FINISH) • Mount: PM60C • Transformer: TBD	Integral LED • CCT: 2700K • CRI: 90 • Lumens: 691	8	12	LED	MLV	• Conceal remote transformer in accessible, ventilated location. • Uplights may be subject to curfew dimming controls - circuit accordingly. • Contractor may specify alternative mounting accessories.
AL2	Tree ring with two uplights and one downlight and: • Optics: 35" • Dimensions: 2.45'Ø x 8.65'L • Transformer: remote, dimming	Tree Ring Lights	Hydrel LED • Luminaire: ASPEN-A-P2-90-27K-12-35-WSL-KM-C3-(FINISH) • Mount: TRAR 3FX 12S 78C BL • Transformer: TBD	Integral LED • CCT: 2700K • CRI: 90 • Lumens: 935	33	12	LED	MLV	• Conceal remote transformer in accessible, ventilated location. • Uplights may be subject to curfew dimming controls - circuit accordingly. • Contractor may specify alternative mounting accessories. • Ring to be mounted no less than 9' above grade. Confirm exact height.
BH1	Illuminated bollard with: • Optics: 108" • Dimensions: 5.6"L x 4"W x 39.3"H • Rating: IP65, IK08, 80-UO-G0 • Driver: Integral, dimming	Bollard	Ligman USA Prague 1 Small Bollard UPRA-10002-8W LED-EW-W27-(Finish)-120117v	Integral LED • CCT: 2700K • CRI: 90 • Lumens: 1660	8	120/277	LED	0-10V	• Confirm exact location and orientation.
DW4	Decorative wall sconce, suitable for exterior, with: • Finish: satin black • Dimensions: 18"H x 4.5"W x 2.5" Proj. • ADA: yes • Rating: wet	Exterior Decorative Sconces - Facades	WAC Lighting WS-W29118-30K-6K	Integral LED • CCT: 3000K • CRI: 90 • Lumens: 789	16	120	LED	ELV	• Confirm finish and mounting height with Architect.
PH1	12' exterior pole-mounted downlight cylinder with: • Optics: type IV downlight • Dimensions: 10.7"H x 7.3'Ø • Rating: IP65, IK08, 81-UO-G1 • Driver: Integral, dimming	Pedestrian Pole Light	Ligman USA Tango 36 Single Head Post Top • Luminaire: UTA-20011 36w T4 W30 (finish color) 120/277V DIM • Pole: SC76 (finish)	Integral LED • CCT: 3000K • CRI: 80+ • Lumens: 2777	38	120-277	LED	0-10V	• Confirm selection with Architect. • Provide concrete base as needed.

SHEET INDEX

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LD-2.1	SITE LIGHTING PLAN
LD-2.2	HORIZONTAL PHOTOMETRIC PLAN
LD-2.3	VERTICAL PHOTOMETRIC PLAN

**STIPULATION SET
RETAIN FOR RECORDS
APPROVED**

09/18/2025

DATE



APPROVED BY

38-DR-2022

7/16/2024

**LIGHTING NOTES AND
FIXTURE SCHEDULE**

Scale

NONE

Date

July 12, 2024

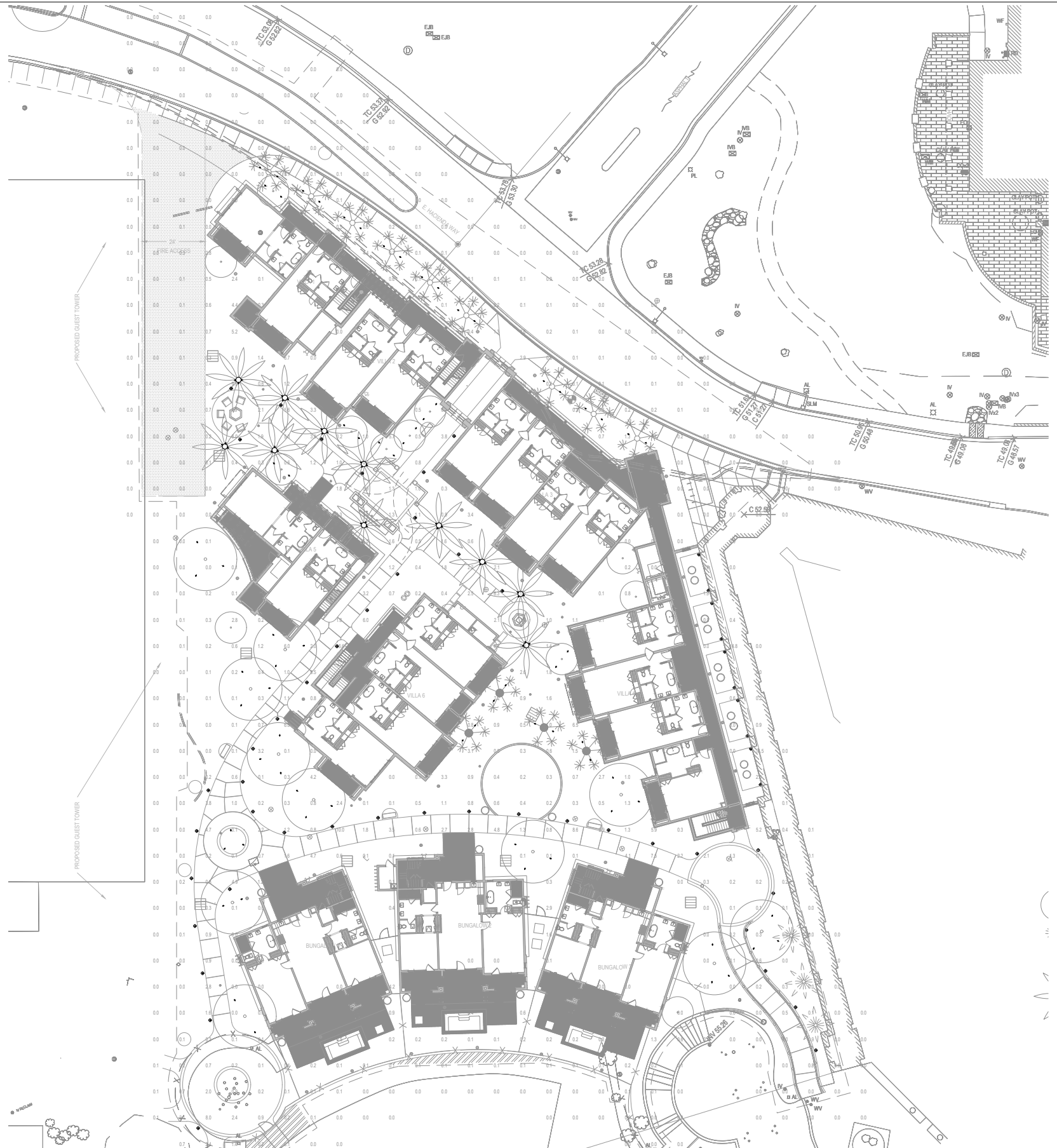


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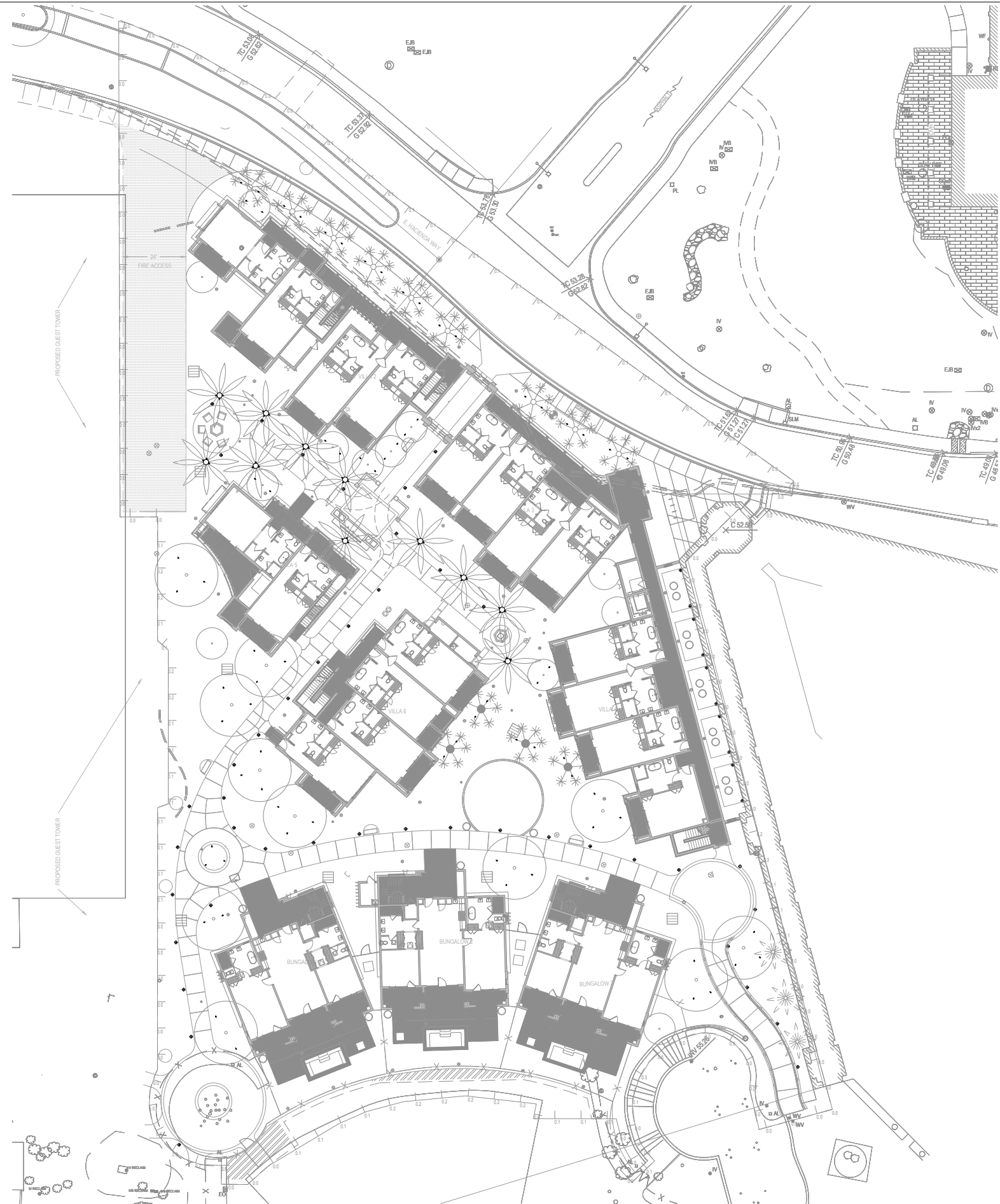
SITE LIGHTING PLAN

Scale 3/64" = 1'-0" Date July 12, 2024



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7/16/2024



VERTICAL
PHOTOMETRIC PLAN

Scale 3/64" = 1'-0" Date July 12, 2024